



## BTS7 Stainless Steel Clean Steam Trap

### Description

The Spirax Sarco BTS7 is a sealed thermostatic steam trap designed to remove condensate from clean steam systems with minimal backing up. Applications include sterile steam barriers, process vessels and CIP/SIP systems. Manufactured in 316L stainless steel with minimal crevices, it is self-draining and operates close to steam temperature. Traps are individually packaged with protective end caps and sealed in a polythene bag.

### Options

Fixed bleed to ensure fail open operation.  
Special connections to suit most piping systems.

### Standards

The BTS7 has been designed and built in general accordance with ASME BPE. It also complies with the requirements of the Pressure Equipment Directive (PED). All wetted parts of this trap are manufactured from FDA approved materials.

### Certification

This product is available with the following certification:

- Manufacturers Typical Test Report.
- Certificate of conformity for FDA, ADI and TSE/BSE.

**Note:** All certification/inspection requirements must be stated at the time of order placement, and may be subject to additional cost.

### Sizes and pipe connections

¼", ½", ¾", 1" screwed BSP or NPT.  
½", ¾", 1" O/D x 16 swg (0.065") wall thickness tube butt weld.

#### DIN 11850 (Series 1) tube butt weld ends

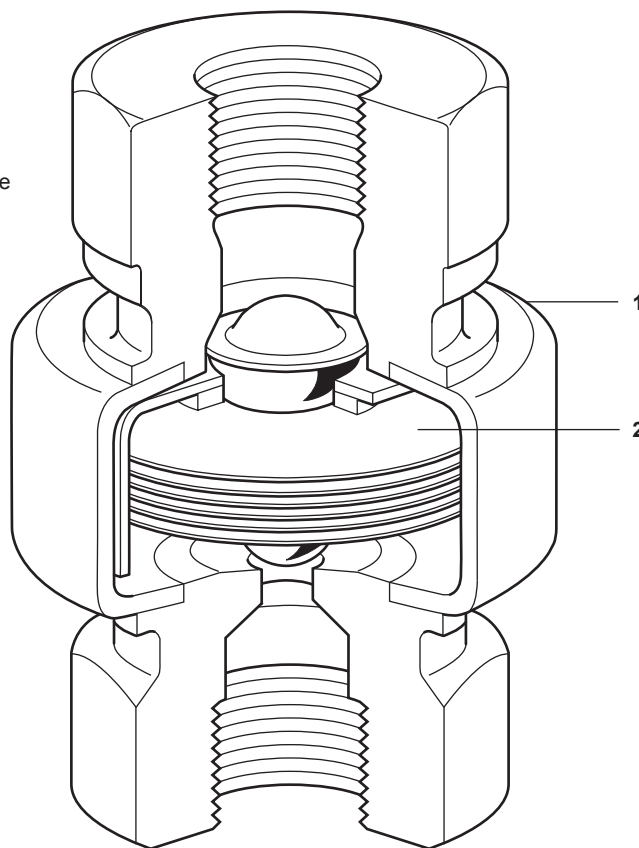
12 mm O/D x 1.0 mm wall thickness tube butt weld (DN10-D).  
18 mm O/D x 1.0 mm wall thickness tube butt weld (DN15-D).

#### ISO 1127 (Series 1) tube butt weld ends

13.5 mm O/D x 1.6 mm wall thickness tube butt weld (DN8-I).  
17.2 mm O/D x 1.6 mm wall thickness tube butt weld (DN10-I).  
21.3 mm O/D x 1.6 mm wall thickness tube butt weld (DN15-I).

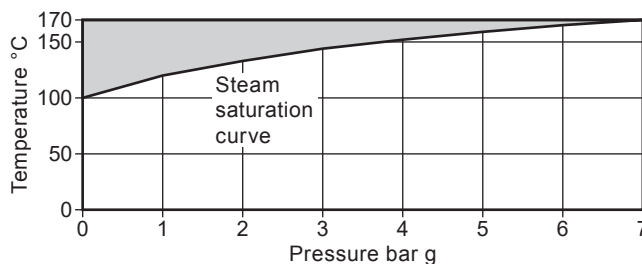
### Materials

No.	Part	Material	
1	Body	Stainless steel	AISI 316L (1.4404)
2	Element	Stainless steel	AISI 316L (1.4404)



**BTS7**  
with screwed connection

## Pressure/temperature limits



The product should not be used in this region as damage to the internals may occur.

### Body design conditions

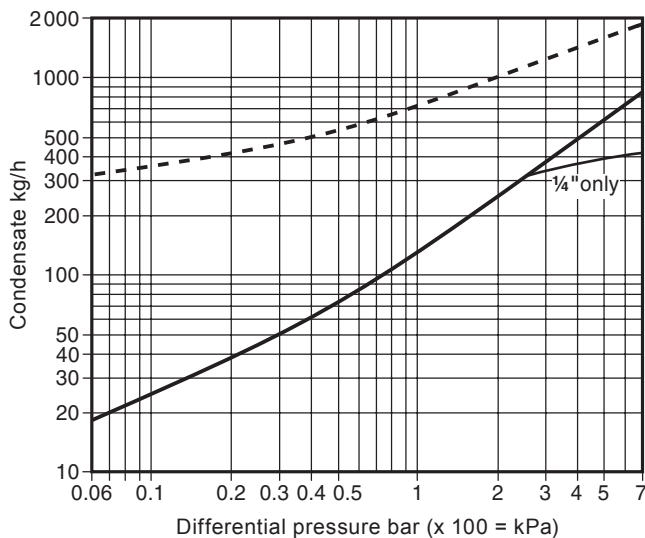
PMA	Maximum allowable pressure	7 bar g @ 170 °C
TMA	Maximum allowable temperature	170 °C @ 7 bar g
	Minimum allowable temperature	-254 °C
PMO	Maximum operating pressure for saturated steam service	7 bar g @ 170 °C
TMO	Maximum operating temperature	170 °C @ 7 bar g
	Minimum operating temperature	0 °C
	Designed for a maximum cold hydraulic test pressure of:	10.5 bar g

### Dimensions/weights (approximate) in mm and kg

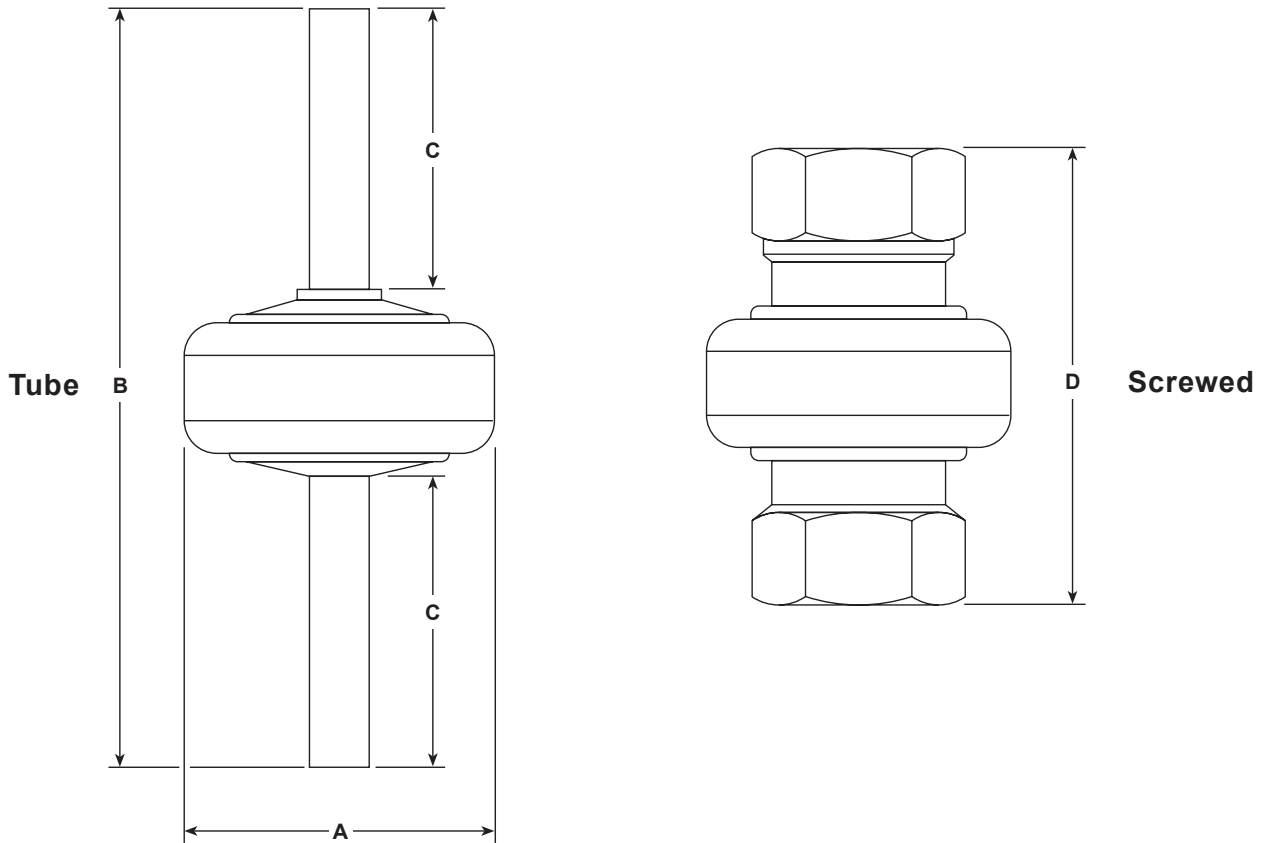
Size	A	B Tube	C	D Screwed	Weight	
					Tube	Screwed
¼"	40	-	-	58	-	0.53
½"	40	106	40	74	0.44	0.49
¾"	40	106	40	81	0.51	0.60
1"	40	106	40	95	0.60	0.73
DN8*	40	106	40	-	0.35	-
DN10	40	106	40	-	0.35	-
DN15	40	106	40	-	0.42	-

\*DN8 only available for ISO 1127 tube ends.

### Capacities



Cold water capacity - - - - Hot water capacity ———



### Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P180-05) supplied with the product.

#### Installation note:

The trap is designed for installation in vertical lines with the flow downward to ensure self-draining operation. Do not expose the element to superheat conditions since over-expansion may result.

Suitable isolation valves must be installed to allow for safe maintenance/replacement.

### How to order

**Example:** 1 off Spirax Sarco non-maintainable DN15 BTS7 clean steam trap with tube ends to ISO 1127, Series 1. (21.3 mm O/D x 1.6 mm wall thickness). Tangent length of tube ends to be 40 mm for ease of orbital welding. Body to be self-draining. Suitable for pressures up to 7 bar g.

### Spare parts

There are no spare parts for the BTS7.